1. (Currently amended) The method of alleviating thermal distortion at the interface between a laser bar and the mounting surface of a heat sink having different coefficients of thermal expansion by ~~modifying~~ locally lowering the effective coefficient of thermal expansion of the heat sink's laser bar mounting surface ~~of a heat sink having~~ to more closely match that of the laser diode bar, comprising:

a. mounting said laser bar to said mounting surface of said heat sink; and

b. attaching to a surface of said heat sink immediately adjacent to an edge of said laser bar ~~mounting surface~~ at least one ceramic plate having a coefficient of thermal expansion lower than that of each of said laser bar and said heat sink to locally modify the coefficient of thermal expansion of said heat sink mounting surface in the area thereof on which said laser bar is mounted.

2. (Cancelled) The method of claim1 wherein said laser bar is directly mounted on a surface of said heat sink.

3. (Cancelled) The method of claim1 wherein one said ceramic plate is mounted on a surface of said heat sink adjacent to but other than said laser bar mounting surface.

4. (Cancelled) The method of claim 3 wherein another ceramic plate is mounted on said laser bar mounting surface of said heat sink.

5. (Currently amended) The method of claim ~~3~~ 1 wherein said heat sink is a microchannel heat sink.

6. (Cancelled) The combination of a semiconductor laser diode bar, at least one ceramic plate and a microchannel heat sink, said heat sink having a plurality of surfaces including a mounting surface for said laser diode bar, said ceramic plate being bonded to at least one of said plurality of surfaces adjacent to the surface on which said laser diode bar is mounted, said ceramic plate having a coefficient of thermal expansion lower that of said laser bar and said heat sink, said ceramic plate locally modifying the heat transfer coefficient of said heat sink in said area adjacent to the surface on which said laser diode bar is mounted.

7. (Cancelled) The combination of claim 6 wherein said one surface is a different surface of said heat sink from said mounting surface on which said semiconductor laser diode is mounted.

8. (Cancelled) The combination of claim 7 wherein an additional plate having a coefficient of thermal expansion lower than that of said laser bar and said heat sink is affixed to an additional surface of said heat sink to locally modify the coefficient of thermal expansion of said heat sink adjacent to the area on which said laser bar is mounted.